## REMARKS

The Office action of November 20, 2009, has been carefully considered.

Claim 25 has been corrected to depend from Claim 19, rather than canceled Claim 1.

Claims 19-21, 23-31 and 37 have been rejected under 35 USC 103(a) over Collins in view of Ishii, with further evidence provided by the World Food Programme's specification for noodles, and Claims 20-22, 25-27 and 29 have been rejected under 35 USC 103(a) over Collins in view of Ishii and further in view of Yvin et al.

Collins is directed to a general process for kneading dough, with the inclusion of ascorbic acid as an improver, in the presence of air or an oxygen-containing gas. The use of ozone is not suggested.

Ishii has been cited to show a method for kneading dough containing soft wheat flour to produce noodles, in particular udon noodles, in the presence of wetting water and ozone. The problem to be solved by Ishii is to improve long-term preservation of the noodles, and the problem is solved by adding ozone as a disinfectant.

In the manufacture of noodles, water is added to enable the flour and other ingredients to be mixed and shaped, and the noodles obtained are then dried and stored. Long term storage can present problems due to residual microorganisms, and Ishii teaches adding ozone to the water to reduce the presence of the residual microorganisms.

The process of Ishii is much different from that of the invention, which produces leavened dough, particularly bread dough. Claim 19 has now been amended to specifically recite a method for processing dough comprising kneading the dough in the presence of wetting water and leaven, and subsequently permitting fermentation of the kneaded dough. New Claim 38 recites that the leaven is yeast. These amendments are

supported by the present specification at page 9, line 15 and page 22, lines 3-7.

Moreover, Applicants have shown by experimental results improvements in dough processing which occur specifically in relation to kneading leavened dough. In particular, the rheo-fermentometer study found on pages 21 and 22 of the specification demonstrates a better oxidation process inducing greater $CO_2$ production with better retention, utilizing the process of the invention, and the study using a consistograph found on pages 22 and 23 of the specification shows that the pressure of the sample treated with ozone during its kneading rises faster than that of the non-treated sample and the pressure of this sample decreases more slowly than the pressure of the non-treated sample.

Applicants have further shown a reduction in energy costs resulting from kneading in the presence of ozone, as described on pages 20 and 21 of the specification. Reductions in kneading time between 16 and 27% of the initial time using conventional methods have been found.

Taking the teachings of Ishii into account when considering the Collins disclosure, one of ordinary skill in the art might expect a reduction in residual microorganisms as is taught by Ishii. However, disinfection is not as great an issue in the production of bread dough, which is baked at some point after fermentation and which does not present the same storage problems as noodles, which are dried without baking. Moreover, there is absolutely no disclosure or suggestion in either Collins or Ishii of the advantages which are obtained in kneading leavened dough according to the invention, the reduction in kneading time and energy, the greater $CO_2$ production and the faster rise in pressure and slower decrease in pressure, as noted above.

Thus, Applicants have clearly demonstrated unexpected advantages when ozone is used in the kneading process in

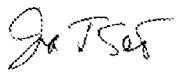
connection with leavened dough, and these advantages are not in any way disclosed or suggested by the cited references.

Yvin et al has been cited to show a method of ozonating grain flour, but does not otherwise cure the defects of the Collins and Ishii references.

Withdrawal of these rejections is accordingly requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application is earnestly solicited.

Respectfully submitted,



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